**Water!**

**Teacher Candidate \_Amanda Stosiek\_\_\_\_\_\_\_\_ Grade Level\_\_\_\_\_\_ Date of lesson\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Content Standards:**

C. Understand relationships between geographic factors and society.

• 17.C.1a: Identify ways people depend on and interact with the physical environment (e.g., farming, fishing, hydroelectric power).

• 17.C.1b: Identify opportunities and constraints of the physical environment.

• 17.C.1c: Explain the difference between renewable and nonrenewable resources

**Learner Background:**

Students may have little formal background on the environment; students have daily experience with water.

**Student Learning Objective(s):**

Students will be able to determine whether water is a renewable or nonrenewable resource.

Students will be able to identify ways people depend on water.

Students will be able to identify opportunities and limits of using water.

**Assessment:**

**Materials/Resources:**

small stones, large stones, paper towels, coffee filters, sand, cotton balls, water, dirt, oil, rubber bands, clear plastic bottles, powder drink mix, large plastic tubs or buckets,

water irrigation system image

**Teaching Model/Strategy**

Accurately names model/strategy; Explains **WHY** this model/strategy is chosen for these learners; Explains **how** model/strategy lends itself to learning this content, these skills and/or dispositions.

**Learning Activities:**

**Initiation:**

**http://water.usgs.gov/edu/photos-wateruse.html#2** water irrigation system image

ask students what is going on in the image, and get the conversation going about water.

ask more questions about water such as how else do you use it? how much do you use?

**Lesson Development:**

INTERACTION: fishing, power, watering crops, drinking, cleaning, swimming,

OPPORTUNITIES: energy, life, food

LIMITS: renewable resource, but unevenly distributed [team building activity with unevenly distributed water

Activity: Divide class into four teams. One will have access to lots of fresh water readily available, another to lots fresh water with limited access, another to a little bit of fresh water readily available, and lastly one to lots of contaminated water. Assign them a task - make a glass of lemonade, wash the glass, and then wash hands.

Conclude the activity with

CHANGES: dams, aqueducts/irrigation, filtration

5E filtration project: Give students an abundance of materials (small stones, large stones, paper towels, coffee filters, sand, cotton balls for filtering, dirty water which can be made with water, dirt, oil, rubber bands, and clear plastic bottles) and see how clean they can get the water. The point of the experiment is not necessarily the process of filtering but for students to build on the previous "changes" day as well as serve as an introduction to ways we change water.

REORGANIZE (lessons/days either by IOLC or resources)

**Closure:**

**Individuals Needing Differentiated Instruction:** Describe 1 to 3 students with identified instructional needs. (These students may be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels.)

Student Name

• What is the student’s identified instructional need?

• What evidence do you have that this is an instructional need?

Describe strategy for differentiating instruction **in this lesson** to meet this need.

**Reflection on Practice:**

**Student Achievement:**

Specifically analyzes student learning ***for each SLO***. *What differences do you notice in the performance of individual students?* Note needs or opportunities for reteaching or enrichment for specific learners.

**Teacher Efficacy:** (Evaluation and Assessment of *one’s own teaching*): Examines/explains impact of personal teaching practice by responding to following:

1) What worked well and why?

2) What did not work well and why?

3) What actions will be taken now which are: a*) immediate* **and** b) *long range*?

4) Briefly describes ONE *reasonable* ***alternative approach*** that could be used to achieve these same SLOs?